



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/817,646

04/01/2004

Dennis William Fleege

CRC-167/47181-00289USPT

3383

23569

7590

08/08/2005

SQUARE D COMPANY
INTELLECTUAL PROPERTY DEPARTMENT
1415 SOUTH ROSELLE ROAD
PALATINE, IL 60067

EXAMINER

DONOVAN, LINCOLN D

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/817,646

Applicant(s)

FLEECE ET AL.

Examiner

Lincoln Donovan

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,8-10,12-19,21-25 and 27-29 is/are rejected.
- 7) ☒ Claim(s) 6,7,11,20 and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 8-10, 12, 16-19, 23-25 and 27-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Nau et al. [US 2,225,791].

Nau et al. disclose a circuit breaker gas venting arrangement comprising:

- a base [10] having at least one chamber area and a floor portion [figure 1];
- an interruption means [figure 1] mounted on the base;
- an opening [48] adjacent the at least one chamber area and positioned a distance away and elevated from the floor;
- a wall portion [figure 1] distal the entry point of arc gas into the chamber protected by the structure; and
- a structure [50] having an angled edge portion leading away from the floor portion adapted to direct gas caused by an electrical interruption event towards the opening and subsequently to an elongated vent chute to direct the gas from the circuit breaker.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2832

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-5 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nau et al. in view of Yokoyama et al. [US 5,164,693].

Nau et al. disclose everything claimed except the base being engaged with a trip unit to form part of the chamber.

Yokoyama et al. disclose a circuit breaker [1] having a trip unit [52, 25] having a portion flush with part of an arc chamber [figure 1, column 9, lines 22-46].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to mount the trip unit with the chamber of Nau et al., as suggested by Yokoyama et al., for the purpose of reducing the size of the breaker.

Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nau et al. in view of Arnold [US 6,188,036].

Nau et al. disclose everything claimed except the use of multiple vent chutes.

Arnold discloses a circuit breaker [10] having a plurality of vent chutes [62, 64, figure 3].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a plurality of vent chutes with the circuit breaker of Nau et al., as suggested by Arnold, for the purpose of dispersing arc gas quickly.

Allowable Subject Matter

Art Unit: 2832

Claims 6-7, 11, 20 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 05-19-05 have been fully considered but they are not persuasive.

Applicant argues:

[1]: Nau et al. fail to teach a structure in the cavity being adjacent to the arc chute having an edge portion angled toward the opening;

[2]: Nau et al. fail to teach the structure directing the gas away from a wall structure adjacent the vent chute; and

[3] Nau et al. fail to teach the opening being above the base and the structure directing the gas thereto; and

Examiner disagrees:

Regarding [1]-[3]: Nau et al. teaches a structure [60] in the cavity, see figure 1, directing gas away from a wall, see arrows indicating gas flow, to an opening elevated from the base surface. Applicant has not claimed any specific wall or placement of the "structure." Applicant merely claims that the structure has an angled edge portion.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2832

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lincoln Donovan whose telephone number is 571-272-1988. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

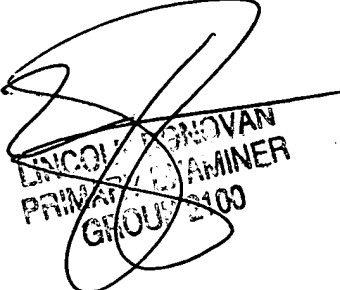
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/817,646

Page 6

Art Unit: 2832

Idd


LINCOLN GROGAN
PRIMARIAL EXAMINER
GROUP 2100